

Windows®. Life without Walls™.
Fujitsu recommends Windows 7.

Data Sheet

Fujitsu ESPRIMO E9900 0-Watt Desktop PC

The innovative 0-Watt PC

As a 0-Watt PC, the ESPRIMO E9900, equipped with innovative technology from Fujitsu and Intel®, is a power-saving miracle meeting all business and space requirements. With a volume of less than 13 litres it can be positioned vertically or horizontally - ideal for every desk. Made of specially selected material and, in addition to the 0-Watt function, equipped with further power-save options, such as a switched monitor outlet and power management, the ESPRIMO small form factor PC already meets today the legal requirements of tomorrow. Furthermore, this desktop PC, equipped with a power supply with up to 89% efficiency, meets ENERGY STAR® certification requirements. Don't make any compromises!



0-Watt PC

Cost savings by completely reducing off-mode losses

- Patented function for 0-Watt power consumption in off and hibernating mode with simultaneous management in a time slot that can be optionally set

Environmentally conscious product with ENERGY STAR certification

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle

Highest energy efficiency coupled with intelligent performance

The best-in-class regarding power consumption combined with new levels of performance

- State-of-the-art Intel® Core™ processors with Turbo Boost and hyperthreading technology and a power supply with up to 89% efficiency

System management

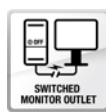
Easy system administration for complex IT infrastructure

- Intel® vPro™ technology (depending on CPU)

Silent operation

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept



Components

Processor	Intel® Core™ i7-870 processor (4 Cores / 8 Threads, 2.93 GHz, 8 MB)
	Intel® Core™ i5-680 processor (2 Cores / 4 Threads, 3.6 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5-660 processor (2 Cores / 4 Threads, 3.33 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5-650 processor (2 Cores / 4 Threads, 3.20 GHz, 4 MB, Intel® HD Graphics)
	Intel® Pentium® processor G6950 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)
Operating system	
Operating system	Genuine Windows® 7 Home Basic (EM) 32-bit
	Genuine Windows® 7 Home Premium 64-bit
	Genuine Windows® 7 Professional 32-bit
	Genuine Windows® 7 Professional 64-bit
Operating system compatible	
Operating system compatible	openSUSE Linux
	Genuine Windows Vista®
	Genuine Windows® XP
Operating system notes	
Operating system notes	Buy Microsoft® Office 2010 to use the full-featured Office software on this PC.
	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
Memory modules	
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
Hard disk drives (internal)	
Hard disk drives (internal)	SSD SATA, 128 GB, 2.5-inch
	SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical
	SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.
Hard disk notes	
Hard disk notes	Supporting NCQ and 3 GBit
Graphics add on cards (optional)	
Graphics add on cards (optional)	NVIDIA® Quadro® NVS 290 low profile, 256 MB
	NVIDIA® GeForce® GT 420
	NVIDIA® GeForce® 405 display port low profile, 512 MB
	DP to DVI-D (single link) Adapter Cable
Drives (optional)	
Drives (optional)	Blu-ray Disc™ Triple Writer
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, USB 2.0, 3.5-Inch
	MultiCard Reader 20in1 USB 3.0 front con., 3.5-Inch
Interface add on cards/components (optional)	
Interface add on cards/components (optional)	WLAN III, 802.11g/Draft-n (Windows only)
	USB 3.0 PCIe x1
	Parallel Interface
	Modem adapter kit (EU)
	Modem 56k incl. RJ11 modem cable
	Gigabit Ethernet PCIe x1
	FireWire PCI-Card IEEE1394
	eSATA Interface
	Dual serial card PCI LP
Base unit	
Base unit	ESPRIMO E9900 0-Watt

Mainboard

Mainboard type	D2924
Formfactor	proprietary
Chipset	Intel® Q57
Processor socket	LGA 1156
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1333 MHz
Memory notes	Dual channel support. For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1000 MBit/s Intel® 82578 DM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio

I/O controller on board

Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0

Interfaces

Audio: line-in	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	12
USB front	2
USB rear	6
USB internal	4
VGA	1 (via DVI to VGA adapter; included for onboard graphics only)
DisplayPort	1 (for onboard graphics only)
DVI	1 (for onboard graphics only)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
Interface Module notes	Anytime USB charge functionality

Input device / components

	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse

Drive bays

Drive bays total	3
3.5-inch internal bays	1
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	optional external bay as internal 3,5"

Slots

PCI-Express 2.0 x16	1 x (210 mm) Low profile
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Slots	
PCI-Express x4 (mech x16)	1 x (210 mm) Low profile
PCI (32-bit / 33 MHz)	2 x (190 mm) Low profile
Slots optional configuration	or 1x PCI Express x16 low profile (190mm) and via Riser 2 x PCI full height (174 / 210 mm)

Graphics on board

Graphics brand name	Intel® HD Graphics (integrated in dual-core processors only)
Shared video memory	up to 1759 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / -
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
Graphics features	Dual display support DirectX 10.1 HDCP support OpenGL® 2.0
Graphics notes	Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory. Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

Electrical values

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 86% / 89% / 87% 0-Watt mode automatically
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	250 W
Power factor correction/active power	active
Monitor outlet	Switched

Power consumption

Power consumption note	See white paper Energy Consumption 0-Watt mode automatically
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Power consumption

Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=73db6c1e-bf45-47be-9563-8f7633c0767f
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Heat dissipation

Heat dissipation notes	See white paper Energy Consumption
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Noise for standard configuration (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™ i5-670 ; Intel® Core™ i7-860 including NVIDIA® GeForce® 9500GS
Noise Operation mode 1: ODD load (Blue angel requirement)	4.7 B / 32 dB(A) ; 4.5 B / 30 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.6 B / 20 dB(A) ; 3.4 B / 18 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.5 B / 19 dB(A) ; 4.1 B / 27 dB(A)
Noise Operation mode 4: High load	3.6 B / 20 dB(A) ; 4.1 B / 26 dB(A)
Noise Operation mode 5: Office applications	3.6 B / 20 dB(A) ; 3.7 B / 21 dB(A)
Idle mode (Blue Angel requirement)	3.5 B / 19 dB(A) ; 3.4 B / 17 dB(A)
Noise notes / description	A weighted sound power level L _{wad} (in B) / workplace related A-weighted sound pressure level L _{pAm} (in dB(A)), Bystander position

Dimensions / Weight / Environmental

Dimensions (W x D x H)	340 x 380 x 100 mm
Operating position	Vertical / horizontal (no feet needed)
Weight	approx. 10 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35C

Compliance

Product	ESPRIMO E9900
Model	DT7-2924
Germany	Blauer Engel / Blue Angel in progress GS optional
Europe	CE Nordic Swan
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 EPEAT® Silver (dedicated regions)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Additional Software

Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 9 Essentials XL

Miscellaneous

Thermal management
Keyboard on (Special Fujitsu keyboard required)
Extended lifetime

Compatibility (references)

DMI 2.0
PC 2001
WMI 1.5
USB 2.0
SMBIOS

Manageability**Manageability technology**

DeskUpdate Driver management
PXE 2.1 Boot code
Wake up from S5 (off mode)
Intrusion switch (optional)
iAMT 6.0

Manageability software

DeskView 10.x client management including:

DeskView components

On/Offline remote client management
Detailed system inventory management and reports
BIOS Management
Remote power management
System notifications
Advanced alerts (ASF implementation)
Security Remote Control
DeskView Helpdesk Integration
WoL (Wake on LAN)

Manageability link

<http://ts.fujitsu.com/manageability>
<http://www.altiris.com/fujitsu>

Security**System protection**

Kensington Lock support
Eye for padlock
Optional: Integrated cabinet lock

Audit proof protection

Boot sector virus protection
Write protect option for the Flash EPROM
Embedded security (TPM 1.2)
Control of all USB interfaces
External USB ports can be disabled separately
Control of external interfaces

Access protection

User and supervisor BIOS password
SystemLock 2 BIOS SmartCard Security
Hard disk password
Optional: Access protection via external SmartCard reader
Optional: Access protection via internal SmartCard reader

Serviceability

FlexySlot
EasyFix
EasyChange for HDD
EasyChange for optical drives

Packaging information**Packaging dimension**

500x290x540 mm

Max. quantity / pallet

24

Material - Weight (g) Carton

1270 g

Material - Weight (g) EPS / PS

230 g

Material - Weight (g) PE

appr. 60 g

Packaging notes

printed user documentation is bleached in chlorine free process

Warranty**Standard Warranty**

3 years

Service level

Bring-In / On-Site Service (depending on country)

Maintenance and Support Services - the perfect extension

Warranty	
Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu ESPRIMO E9900 0-Watt, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ESPRIMO E9900 0-Watt, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/ESPRIMO>

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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